DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

STEVE BULLOCK , GOVERNOR

STATE OF MONTANA

Telephone: (406) 563-6078
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ANACONDA UNIT OFFICE
1300 Maguire Road
Anaconda, MT 59711

December 19, 2016

BLM – LaMarche Forest Health Project AP

ALTERNATIVE PRACTICE RESPONSIBILITY AFFIDAVIT

In consideration of DNRC's approval of the Alternative Practice in T2N, R13W, Sec. 22, I hereby certify that I, or by written contract the legal entity I represent, am responsible for the compliance with the Montana Streamside Management Zone Law. I understand that failure to implement any of the mitigation measures required by the DNRC will be considered a violation of the SMZ Law (77-5-301 et. Seq.), and may result in penalties assessed against me or the legal entity I represent.

Signature of Responsible Party

1/19/2017

Date

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Ref: BLM – LaMarche Forest Health Project AP

Dear Mr. O'Brien,

This letter is in reference to a request made by the Bureau of Land Management to the Montana Department of Natural Resources and Conservation for an Alternative Practice (AP). This AP is located in Section 22 of T2N, R13W in Deer Lodge County. After review of Environmental Assessment Checklist prepared for this request, the AP to allow equipment operations in the SMZ of LaMarche Creek is approved, subject to the following conditions:

1) Operation of feller-buncher would be allowed inside the SMZ on LaMarche Creek up to 15 feet from the ordinary high water mark. Operation would be in a "straight in and straight out" manner as practical.

2) Buncher felled trees would be placed outside of the 50 foot buffer for skidding.

3) All operator caused slash will be promptly removed from stream.

4) Operation would only occur during periods when ground disturbance can be minimized under conditions of:
   a. Dry ground <20% moisture content
   b. Frozen ground to a depth of four inches and/or snow covered to eight inches.

5) Small, un-infested lodgepole pine would be retained where possible. Other species of trees such as Douglas-fir, Engelmann spruce, quaking aspen and brush species, would be retained and protected from damage.

6) Grass seeding of disturbed areas will take place after operations.

Approved AP's, including any additional conditions required by DNRC, shall have the same force and authority as the standards contained in 77-5-303, MCA, and shall be enforceable by DNRC under 77-5-305, MCA, to the same extent as such standards.

It is your responsibility to ensure that your operators understand that an AP has been issued for their operations in this area, and that these conditions must be fully met to achieve compliance with the SMZ Law.

This approval is contingent upon your execution and return of the attached statement to the DNRC Anaconda Unit Office.

Thank you for your cooperation in this matter. Please contact me if you have any questions.

Respectfully yours,

Sean Steinebach
Service Forester

Cc: HRA file, Landowner, Applicant,
Unit Office, Land Office,
Service Forestry Bureau

CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	BLM LaMarche Creek Salvage
Proposed Implementation Date:	Upon Signature
Proponent:	Bureau of Land Management
Location:	T2N R13W Sec 22 (see map)
County:	Deer Lodge

I. TYPE AND PURPOSE OF ACTION

The BLM is requesting a Streamside Management Zone (SMZ) Alternative Practice for approximately 0.5 miles of the 935 Forest Road (see attached map). This area has been significantly affected by mountain pine beetle in the lodgepole pine stands and this Alternative Practice would facilitate safe removal of dead and dying trees that would become a safety hazard near roads and recreational areas.

According to MCA 77-5-301 through 307, DNRC is authorized to administer and enforce the provisions of the SMZ Law. This Law was developed to protect the public interest of water quality and quantity within forested areas; provide for standards, oversights and penalties to ensure forest practices conserve the integrity of SMZ's; provide guidelines for wildlife management within SMZ's; and allow operators necessary flexibility to use practices appropriate to site-specific conditions in the SMZ. ARM 36.11.301 through 313 further specify the design of SMZ boundaries, allowable activities and prohibitions within the SMZ, penalties and other related provisions.

According to MCA 77-5-304 and ARM 36.11.310, DNRC may approve alternative practices that are different from practices required by the SMZ Law only if such practices would be otherwise lawful and continue to conserve or not significantly diminish the integrity and function of the SMZ. The proximity of the beetle infested trees to roads and recreation areas has created safety issues that may require treatments outside of the allowances of the SMZ law. Treatments would be limited to operation of a feller-buncher inside the 50 foot SMZ, but no closer than 15 feet to the ordinary high water mark (OHWM). These treatments would be conducted on slopes less than 15% and would allow removal of lodgepole pine to below minimum retention standards as identified under Rules 4 and 5 in the *Montana Guide to the Streamside Zone Law and Rules 2006* (ARM 36.11.310-313). Additional stipulations of this request would include:

- Operation of the feller-buncher inside the SMZ would be in a straight-in and straight-out manner to minimize disturbance inside the 50 foot boundary.

- Operation would only occur during periods when soil disturbance can be minimized under conditions of frozen ground to a depth of four inches, snow to a depth of eight inches, or periods when ground moisture is less than 20%.

- If operations take place during periods of dry ground conditions, mitigation measures would include grass seeding and slash filter windrows placed on disturbed areas to prevent run-off and sediment from reaching water.

- Felled trees would be placed outside of the 50 foot SMZ boundary for skidding.

- Small, un-infested lodgepole pine, in addition to other species of trees such as Douglas-fir, Engelmann spruce, quaking aspen and all brush species, would be retained and protected to the greatest extent possible.

This AP would be issued under this EA Checklist for a period of two years.

II. PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:

Provide a brief chronology of the scoping and ongoing involvement for this project.

MT DNRC and the USDI Bureau of Land Management.

2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:

N/A

3. ALTERNATIVES CONSIDERED:

Alternative A –No Action.

This alternative would not operate machinery inside the fifty foot buffer. Beetle-killed trees may be hand-felled to minimum retention standards, left standing or removed in a non-commercial manner, such as by an arborist. In instances when the trees are removed non-commercially, the DNRC has no jurisdiction over operations and excessive disturbance or increased risks to safety may occur.

Alternative B – Action.

SMZ Alternative Practice would be issued for beetle salvage on the LaMarche Salvage Project (see attached map). Please see *Type and Purpose of Action* for a full description of this alternative.

III. IMPACTS ON THE PHYSICAL ENVIRONMENT

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" If no impacts are identified or the resource is not present.*

4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify any cumulative impacts to soils.

Alternative A - No Action

No equipment operation would be allowed inside the 50 foot SMZ. Minimum retention standards would be recognized. Trees would be hand-felled and skidded by cable through the SMZ. Felling and skidding may occur on various types of soils and on various degrees of slopes. Cable skidding each tree out of the SMZ would likely create more soil disturbance than a feller-buncher carrying multiple trees out of the SMZ for skidding.

Alternative B – Action

Equipment operation would be limited to soils that are described as "moderately or well suited" for timber harvest in the Web Soil Survey (see attached). Equipment operation would be limited to areas where slope is less than 15%. Mitigation measures would include operating season restrictions that require frozen ground to a depth of four inches, snow depth of eight inches or ground moisture of 20% or less. In addition, grass-seeding and installation of erosion control measures such as a slash-filter windrow on any disturbed area upon completion of activity would be required. Minimal direct, indirect or cumulative impacts to soil stability and compaction are anticipated due to the soil rating restrictions, operation restrictions and mitigation measures. See LaMarche Forest Health Project EA.

5. WATER QUALITY, QUANTITY AND DISTRIBUTION:

Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify cumulative effects to water resources.

Alternative A - No Action

No equipment operation would be allowed inside the 50 foot SMZ. Minimum retention standards would be recognized. Trees would be hand-felled and skidded by cable through the SMZ or left standing. Hand-felling operations may introduce low levels of sediment delivery to adjacent waterbodies. Sedimentation delivery from existing roads, other land treatments and developments would continue. Minimal direct, indirect, and cumulative impacts to water quality and quantity would be expected.

Alternative B – Action

The harvest of trees within the first 35 feet of the SMZ may introduce low levels of sediment delivery to adjacent waterbodies. However, the 15 foot equipment exclusion zone would be expected to provide adequate filtration for any displaced soils or increased runoff due to compacted soils in the 15 to 50 foot AP zone. Increases in sedimentation would be expected to be minimal and temporary due to operations only occurring on slopes less than 15% and application of mitigation measures. Mitigation measures include imposing seasonal operating restrictions that require frozen ground to a depth of four inches, snow depth of eight inches or ground moisture of 20% or less; and requiring grass seeding and installation of erosion control measures such as a slash-filter windrow on any disturbed area upon completion of operations. DNRC may monitor AP site to verify effectiveness. Minimal direct, indirect, and cumulative impacts to water quality and quantity are expected due to operation restrictions and mitigation measures. See LaMarche Forest Health Project EA.

6. AIR QUALITY:

What pollutants or particulate would be produced? Identify air quality regulations or zones (e.g. Class I air shed) the project would influence. Identify cumulative effects to air quality.

N/A

7. VEGETATION COVER, QUANTITY AND QUALITY:

What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify cumulative effects to vegetation.

Alternative A - No Action

If no action is taken the dead trees will fall over, potentially causing damage to improvements and people. Trees may be hand-felled to minimum retention standards, but it would be expected that as retention trees fell the landowner would remove them anyway. Hand-felling and skidding hand-felled trees have the potential to be more damaging to the residual stand than the directional felling of a feller buncher. This is due to trees being pulled through the residual stand with less maneuverability, potentially removing bark and pulling over the residual stand.

Alternative B – Action

A query of the Montana Natural Heritage Program shows Lemhi beardtongue as a Species of Concern for T2N, R13W. No occurrence of Lemhi beardtongue has been noted in the AP area. Vegetative communities would be affected to the extent that lodgepole pine would be reduced to below minimum retention standards as outlined in Rule 5 of the Montana Guide to the Streamside Management Zone Law and Rules handbook. Other species of trees such as Douglas-fir, Engelmann spruce and quaking aspen would be retained where present and understory vegetation would be protected to the greatest extent possible. Removal of the dead trees would expedite natural regeneration and cumulative effects to vegetative communities would decrease as trees regenerate and replace those that are harvested. See LaMarche Forest Health Project EA.

8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:

Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify cumulative effects to fish and wildlife.

Alternative A – No Action

Minimum retention standards would be adhered to as well as equipment restrictions. Due to the area being heavily used for recreation and its proximity to roads and cabins, the suitability of the proposed site would continue to be marginal at best for terrestrial and avian habitat. Dead lodgepole pine would eventually fall over and/or be removed in a non-commercial manner.

Alternative B – Action

Due to the area being heavily used for recreation and its proximity to roads and cabins, the suitability of the proposed site would continue to be marginal at best for terrestrial and avian habitat. Operating restrictions and mitigation measures would minimize sedimentation impacts to fish habitat where present. In areas of pure lodgepole pine stands, shading of LaMarche Creek would be reduced and peak seasonal stream temperatures may see an increase in July and August. All other species of trees and brush would be retained and protected to the greatest extent possible. Cumulative impacts would be expected to be short term. See LaMarche Forest Health Project EA.

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9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:

Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of special concern. Identify cumulative effects to these species and their habitat.

Alternative A – No Action

A query of the Montana Natural Heritage Program identifies the area as being possible habitat for fringed myotis, hoary bat, wolverine, northern goshawk, great blue heron, Clark's nutcracker, great grey owl, westslope cutthroat trout, arctic grayling, Gillette's checkerspot and fisher (see attached). Under Alternative A, equipment restrictions would be adhered to as outlined in the SMZ Law.

Minimum retention standards would be adhered to as well as equipment restrictions. Dead lodgepole pine would eventually fall over and/or be removed in a non-commercial manner. Direct, indirect and cumulative effects would not be influenced by the AP.

Alternative B - Action

Proposed actions may cause slight shifts in use by listed species of concern, however, no key habitat components are known to exist in the proposed AP project area and is not expected to appreciably change. If a sighting of any of the listed species of concern (or evidence such as nests, dens etc...) occurs, operations would be halted until, or not allowed, until further assessment could take place. Due to operating restrictions and mitigation measures outlined under Type and Purpose of Action, a low risk of direct, indirect and cumulative effects to listed species of concern would be expected with the action alternative. See LaMarche Forest Health Project EA.

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10. HISTORICAL AND ARCHAEOLOGICAL SITES:

Identify and determine effects to historical, archaeological or paleontological resources.

Although no cultural or paleontologic resources are known to exist in the project APE, a systematic inventory of such resources has not occurred. Because the project is not located on state land, the DNRC has no jurisdiction to require professional level inventories to identify, or develop treatment plans for these National Register eligible properties. See LaMarche Forest Health Project EA.

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11. AESTHETICS:

Determine if the project is located on a prominent topographic feature, or may be visible from populated or scenic areas. What level of noise, light or visual change would be produced? Identify cumulative effects to aesthetics.

Alternative A – No Action

Minimum retention standards would be adhered to as well as equipment restrictions. Dead lodgepole pine would eventually fall over and/or be removed in a non-commercial manner. Aesthetics would be degraded as green trees transitioned to red and eventually fell over.

Alternative B - Action

Potential impacts may be perceived as adverse by recreationists, landowners and travelers. The removal of beetle killed lodgepole pine would look unsightly in the short term, but would encourage regeneration. This regeneration would eventually soften and replace aesthetic quality damaged by mountain pine beetle infestation. See LaMarche Forest Health Project EA.

12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:
Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify cumulative effects to environmental resources.

N/A

13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:
List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.

There have been six SMZ AP's issued in the last two years in this area. All of them have required similar operating restrictions and mitigation measures and have proved beneficial with minimal impacts.

IV. IMPACTS ON THE HUMAN POPULATION

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" If no impacts are identified or the resource is not present.*

14. HUMAN HEALTH AND SAFETY:
Identify any health and safety risks posed by the project.

Travel ways and recreational sites would become unsafe as beetle killed trees begin to fall. The removal of beetle killed tree would improve safety to those that use the area for recreation.

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:
Identify how the project would add to or alter these activities.

N/A

16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:
Estimate the number of jobs the project would create, move or eliminate. Identify cumulative effects to the employment market.

Project would be allowed for a period of two years. Harvest of trees in the AP area may generate 10 mbf and would employ one logging crew over the entire area. In addition this project would provide raw material for local mill operations.

17. LOCAL AND STATE TAX BASE AND TAX REVENUES:
Estimate tax revenue the project would create or eliminate. Identify cumulative effects to taxes and revenue.

Negligible amounts.

18. DEMAND FOR GOVERNMENT SERVICES:
Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify cumulative effects of this and other projects on government services

N/A

19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:
List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.

This Alternative Practice would allow timber salvage in an area considered at high risk for wildfire under the Deer Lodge County Community Wildfire Protection Plans.

20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:
Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify cumulative effects to recreational and wilderness activities.

N/A

21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:
Estimate population changes and additional housing the project would require. Identify cumulative effects to population and housing.

N/A

22. SOCIAL STRUCTURES AND MORES:
Identify potential disruption of native or traditional lifestyles or communities.

N/A

23. CULTURAL UNIQUENESS AND DIVERSITY:
How would the action affect any unique quality of the area?

N/A

24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:
Estimate the return to the trust. Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify cumulative economic and social effects likely to occur as a result of the proposed action.

N/A

EA Checklist Prepared By:	**Name:** Sean Steinebach	**Date:** 12/19/16	
	Title: Service Forester		

V. FINDING

25. ALTERNATIVE SELECTED:

Alternative B - Action

26. SIGNIFICANCE OF POTENTIAL IMPACTS:

No significant impacts to the integrity and function of the SMZ will occur with the implementation of operating restrictions and mitigation measures.

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

[ ]	EIS	[ ]	More Detailed EA	[X]	No Further Analysis

EA Checklist Approved By:	**Name:** Brian Robbins	
	Title: Anaconda Unit Manager	
Signature: Brian S Robbins		**Date:** 12-19-2016

Forestland Planting and Harvesting

This table can help forestland owners or managers plan the use of soils for wood crops. Interpretive ratings are given for the soils according to the limitations that affect planting and harvesting on forestland. The ratings are both verbal and numerical.

Rating class terms indicate the degree to which the soils are suited to a specified aspect of forestland management. *Well suited* indicates that the soil has features that are favorable for the specified management aspect and has no limitations. Good performance can be expected, and little or no maintenance is needed. *Moderately suited* indicates that the soil has features that are moderately favorable for the specified management aspect. One or more soil properties are less than desirable, and fair performance can be expected. Some maintenance is needed. *Poorly suited* indicates that the soil has one or more properties that are unfavorable for the specified management aspect. Overcoming the unfavorable properties requires special design, extra maintenance, and costly alteration. *Unsuited* indicates that the expected performance of the soil is unacceptable for the specified management aspect or that extreme measures are needed to overcome the undesirable soil properties.

Numerical ratings in the table indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the specified aspect of forestland management (1.00) and the point at which the soil feature is not a limitation (0.00).

The paragraphs that follow indicate the soil properties considered in rating the soils. More detailed information about the criteria used in the ratings is available in the "National Forestry Manual," which is available in local offices of the Natural Resources Conservation Service or on the Internet.

Ratings in the columns *suitability for hand planting* and *suitability for mechanical planting* are based on slope, depth to a restrictive layer, content of sand, plasticity index, rock fragments on or below the surface, depth to a water table, and ponding. The soils are described as well suited, moderately suited, poorly suited, or unsuited to these methods of planting. It is assumed that necessary site preparation is completed before seedlings are planted.

Ratings in the column *suitability for use of harvesting equipment* are based on slope, rock fragments on the surface, plasticity index, content of sand, the Unified classification, depth to a water table, and ponding. The soils are described as well suited, moderately suited, or poorly suited to this use.

Reference:
United States Department of Agriculture, Natural Resources Conservation Service, National forestry manual.

Report—Forestland Planting and Harvesting

[Onsite investigation may be needed to validate the interpretations in this table and to confirm the identity of the soil on a given site. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The table shows only the top five limitations for any given soil. The soil may have additional limitations]

Forestland Planting and Harvesting–Beaverhead National Forest Area, Montana							
Map symbol and soil name	Pct. of map unit	Suitability for hand planting		Suitability for use of harvesting equipment		Suitability for mechanical planting	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
682E—Elve bouldery sandy loam, 4 to 25 percent slopes							
Elve	85	Well suited		Well suited		Moderately suited	
						Slope	0.50
						Rock fragments	0.50
54C—Libeg gravelly loam, 4 to 8 percent slopes							
Libeg	85	Well suited		Well suited		Moderately suited	
				Dusty	0.01	Slope	0.50
54E—Libeg gravelly loam, 15 to 35 percent slopes							
Libeg	85	Well suited		Moderately suited		Poorly suited	
				Slope	0.50	Slope	0.75
				Dusty	0.01		
96D—Worock gravelly loam, 4 to 15 percent slopes							
Worock	85	Well suited		Moderately suited		Moderately suited	
				Low strength	0.50	Slope	0.50
				Dusty	0.01	Rock fragments	0.50

Forestland Planting and Harvesting–Deer Lodge County Area, Montana							
Map symbol and soil name	Pct. of map unit	Suitability for hand planting		Suitability for use of harvesting equipment		Suitability for mechanical planting	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
682E—Elve bouldery sandy loam, 4 to 25 percent slopes							
Elve	85	Well suited		Well suited		Moderately suited	
						Slope	0.50
						Rock fragments	0.50
54C—Libeg gravelly loam, 4 to 8 percent slopes							
Libeg	85	Well suited		Well suited		Moderately suited	
				Dusty	0.01	Slope	0.50
54D—Libeg gravelly loam, 8 to 15 percent slopes							
Libeg	85	Well suited		Well suited		Moderately suited	
				Dusty	0.01	Slope	0.50
54E—Libeg gravelly loam, 15 to 35 percent slopes							
Libeg	85	Well suited		Moderately suited		Poorly suited	
				Slope	0.50	Slope	0.75
				Dusty	0.01		
96D—Worock gravelly loam, 4 to 15 percent slopes							
Worock	85	Well suited		Moderately suited		Moderately suited	
				Low strength	0.50	Slope	0.50
				Dusty	0.01	Rock fragments	0.50
145E—Redchief-Mollet complex, 15 to 35 percent slopes							
Redchief	50	Moderately suited		Moderately suited		Poorly suited	
		Stickiness; high plasticity index	0.50	Low strength	0.50	Slope	0.75
				Slope	0.50	Stickiness; high plasticity index	0.50
				Dusty	0.04	Rock fragments	0.50

Forestland Planting and Harvesting–Deer Lodge County Area, Montana							
Map symbol and soil name	Pct. of map unit	Suitability for hand planting		Suitability for use of harvesting equipment		Suitability for mechanical planting	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
245D—Redchief-Mollet bouldery loams, 4 to 15 percent slopes							
Redchief	50	Moderately suited		Well suited		Moderately suited	
		Stickiness; high plasticity index	0.50	Dusty	0.03	Rock fragments	0.50
						Slope	0.50
						Stickiness; high plasticity index	0.50
145E—Redchief-Mollet complex, 15 to 35 percent slopes							
Mollet	35	Moderately suited		Moderately suited		Poorly suited	
		Stickiness; high plasticity index	0.50	Low strength	0.50	Slope	0.75
				Slope	0.50	Stickiness; high plasticity index	0.50
				Dusty	0.01		
245D—Redchief-Mollet bouldery loams, 4 to 15 percent slopes							
Mollet	35	Moderately suited		Moderately suited		Poorly suited	
		Rock fragments	0.50	Low strength	0.50	Rock fragments	0.75
				Dusty	0.01	Slope	0.50

Data Source Information

Soil Survey Area: Beaverhead National Forest Area, Montana
Survey Area Data: Version 18, Sep 19, 2016

Soil Survey Area: Deer Lodge County Area, Montana
Survey Area Data: Version 14, Sep 28, 2015

Montana Natural Heritage - SOC Report

Animal Species of Concern

Species List Last Updated 05/03/2016

11 Species of Concern

Filtered by the following criteria:

Township = 002N013W (based on mapped Species Occurrences)

MONTANA Natural Heritage Program

A program of the Montana State Library's Natural Resource Information System operated by the University of Montana.

Expand All | Collapse All

Introduction

Species of Concern

Species of Concern

11 Species

Filtered by the following criteria:

Township = 002N013W (based on mapped Species Occurrences)

MAMMALS (MAMMALIA)

4 SPECIES

TOWNSHIP = 002N013W (based on mapped Species Occurrences)

SCIENTIFIC NAME / COMMON NAME / TAXA SORT	FAMILY (SCIENTIFIC) / FAMILY (COMMON)	GLOBAL RANK	STATE RANK	USFWS	USFS	BLM	FWP SWAP	% OF GLOBAL BREEDING RANGE IN MT	% OF MT THAT IS BREEDING RANGE	HABITAT
Gulo gulo Wolverine	Mustelidae Weasels	G4	S3	P	SENSITIVE	SENSITIVE	SGCN3	0%	37%	Boreal Forest and Alpine Habitats
		Species Occurrences verified in these Counties: Beaverhead, Broadwater, Carbon, Cascade, Deer Lodge, Flathead, Gallatin, Glacier, Granite, Jefferson, Judith Basin, Lake, Lewis and Clark, Lincoln, Madison, Meagher, Mineral, Missoula, Park, Pondera, Powell, Ravalli, Sanders, Silver Bow, Stillwater, Sweet Grass, Teton, Wheatland								
Lasiurus cinereus Hoary Bat	Vespertilionidae Bats	G3G4	S3				SGCN3	2%	100%	Riparian and forest
		Species Occurrences verified in these Counties: Beaverhead, Big Horn, Blaine, Broadwater, Carbon, Carter, Cascade, Chouteau, Custer, Daniels, Dawson, Deer Lodge, Fallon, Fergus, Flathead, Gallatin, Garfield, Glacier, Golden Valley, Granite, Harding, Hill, Jefferson, Judith Basin, Lake, Lewis and Clark, Liberty, Lincoln, Madison, Mccone, Meagher, Mineral, Missoula, Musselshell, Park, Petroleum, Phillips, Pondera, Powder River, Powell, Prairie, Ravalli, Richland, Roosevelt, Rosebud, Sanders, Sheridan, Silver Bow, Stillwater, Sweet Grass, Teton, Toole, Treasure, Valley, Wheatland, Wibaux, Yellowstone								
Myotis thysanodes Fringed Myotis	Vespertilionidae Bats	G4	S3			SENSITIVE	SGCN3	0%	64%	Riparian and dry mixed conifer forests
		Species Occurrences verified in these Counties: Beaverhead, Big Horn, Blaine, Broadwater, Carbon, Carter, Cascade, Custer, Deer Lodge, Fergus, Flathead, Gallatin, Granite, Jefferson, Judith Basin, Lake, Lewis and Clark, Lincoln, Madison, Meagher, Mineral, Missoula, Powder River, Powell, Prairie, Ravalli, Sanders, Silver Bow, Teton, Treasure								
Pekania pennanti Fisher	Mustelidae Weasels	G5	S3		SENSITIVE	SENSITIVE	SGCN3	1%	31%	Mixed conifer forests
		Species Occurrences verified in these Counties: Beaverhead, Deer Lodge, Flathead, Glacier, Granite, Lake, Lewis and Clark, Lincoln, Mineral, Missoula, Pondera, Powell, Ravalli, Sanders, Teton								

BIRDS (AVES)

4 SPECIES

TOWNSHIP = 002N013W (based on mapped Species Occurrences)

SCIENTIFIC NAME / COMMON NAME / TAXA SORT	FAMILY (SCIENTIFIC) / FAMILY (COMMON)	GLOBAL RANK	STATE RANK	USFWS	USFS	BLM	FWP SWAP	% OF GLOBAL BREEDING RANGE IN MT	% OF MT THAT IS BREEDING RANGE	HABITAT
Accipiter gentilis Northern Goshawk	Accipitridae Hawks / Kites / Eagles	G5	S3				SGCN3	2%	68%	Mixed conifer forests
		Species Occurrences verified in these Counties: Beaverhead, Big Horn, Broadwater, Carbon, Carter, Cascade, Deer Lodge, Fergus, Flathead, Gallatin, Glacier, Granite, Jefferson, Judith Basin, Lake, Lewis and Clark, Liberty, Lincoln, Madison, Meagher, Mineral, Missoula, Park, Petroleum, Pondera, Powder River, Powell, Ravalli, Rosebud, Sanders, Silver Bow, Stillwater, Sweet Grass, Teton, Wheatland								
Ardea herodias Great Blue Heron	Ardeidae Bitterns / Egrets / Herons / Night-Herons	G5	S3				SGCN3	3%	100%	Riparian forest
		Species Occurrences verified in these Counties: Beaverhead, Big Horn, Blaine, Broadwater, Carbon, Carter, Cascade, Chouteau, Custer, Dawson, Deer Lodge, Fallon, Fergus, Flathead, Gallatin, Garfield, Glacier, Golden Valley, Granite, Harding, Hill, Jefferson, Judith Basin, Lake, Lewis and Clark, Liberty, Lincoln, Madison, Mccone, McKenzie, Meagher, Mineral, Missoula, Musselshell, Park, Petroleum, Phillips, Pondera, Powder River, Powell, Prairie, Ravalli, Richland, Roosevelt, Rosebud, Sanders, Sheridan, Silver Bow, Stillwater, Sweet Grass, Teton, Treasure, Valley, Wheatland, Wibaux, Yellowstone **State Rank Reason:** Small breeding population size, evidence of recent declines, and declining regeneration of riparian cottonwood forests due to altered hydrology and grazing.								
Nucifraga columbiana Clark's Nutcracker	Corvidae Jays / Crows / Magpies	G5	S3				SGCN3	9%	84%	Conifer forest
		Species Occurrences verified in these Counties: Beaverhead, Big Horn, Blaine, Broadwater, Carbon, Carter, Cascade, Chouteau, Deer Lodge, Fergus, Flathead, Gallatin, Glacier, Golden Valley, Granite, Jefferson, Judith Basin, Lake, Lewis and Clark, Liberty, Lincoln, Madison, Meagher, Mineral, Missoula, Musselshell, Park, Petroleum, Phillips, Pondera, Powder River, Powell, Ravalli, Sanders, Silver Bow, Stillwater, Sweet Grass, Teton, Toole, Wheatland								
Strix nebulosa Great Gray Owl	Strigidae Owls	G5	S3			SENSITIVE	SGCN3, SGIN	2%	46%	Conifer forest near open meadows
		Species Occurrences verified in these Counties: Beaverhead, Carbon, Deer Lodge, Flathead, Gallatin, Granite, Jefferson, Judith Basin, Lake, Lewis and Clark, Lincoln, Meagher, Missoula, Park, Powell, Ravalli, Silver Bow, Sweet Grass, Teton, Wheatland								

FISH (ACTINOPTERYGII)

2 SPECIES

TOWNSHIP = 002N013W (based on mapped Species Occurrences)

SCIENTIFIC NAME / COMMON NAME / TAXA SORT	FAMILY (SCIENTIFIC) / FAMILY (COMMON)	GLOBAL RANK	STATE RANK	USFWS	USFS	BLM	FWP SWAP	% OF GLOBAL BREEDING RANGE IN MT	% OF MT THAT IS BREEDING RANGE	HABITAT
Oncorhynchus clarkii lewisi Westslope Cutthroat Trout	Salmonidae Trout	G4T3	S2		SENSITIVE	SENSITIVE	SGCN2		34%	Mountain streams, rivers, lakes
		Species Occurrences verified in these Counties: Beaverhead, Broadwater, Cascade, Chouteau, Deer Lodge, Fergus, Flathead, Gallatin, Glacier, Granite, Jefferson, Judith Basin, Lake, Lewis and Clark, Lincoln, Madison, Meagher, Mineral, Missoula, Park, Pondera, Powell, Ravalli, Sanders, Silver Bow, Teton, Wheatland								
Thymallus arcticus Arctic Grayling	Salmonidae Trout	G5	S1		SENSITIVE	SENSITIVE	SGCN1		5%	Mountain rivers, lakes
		Species Occurrences verified in these Counties: Beaverhead, Deer Lodge, Madison, Silver Bow								

INVERTEBRATES - INSECTS

1 SPECIES

TOWNSHIP = 002N013W (based on mapped Species Occurrences)

SCIENTIFIC NAME / COMMON NAME / TAXA SORT	FAMILY (SCIENTIFIC) / FAMILY (COMMON)	GLOBAL RANK	STATE RANK	USFWS	USFS	BLM	FWP SWAP	% OF GLOBAL BREEDING RANGE IN MT	% OF MT THAT IS BREEDING RANGE	HABITAT
BUTTERFLIES										
Euphydryas gillettii Gillette's Checkerspot	Nymphalidae Brush-footed Butterflies	G3	S2						42%	Wet meadows
		Species Occurrences verified in these Counties: Beaverhead, Cascade, Deer Lodge, Fergus, Flathead, Glacier, Madison, Mineral, Missoula, Pondera, Powell								

Potential Species of Concern

Special Status Species

Additions To Statewide List

Species Removed From Statewide List

Species of Greatest Inventory Need

Montana Natural Heritage - SOC Report

Plant Species of Concern

Species List Last Updated **05/03/2016**

1 Species of Concern

1 Potential Species of Concern - Species Occurrences are not maintained for Animal PSOC, therefore we cannot filter these species geographically

Filtered by the following criteria:

Township = 002N013W (based on mapped Species Occurrences)

MONTANA Natural Heritage Program

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Introduction

Species of Concern

Species of Concern

1 Species

Filtered by the following criteria:

Township = 002N013W (based on mapped Species Occurrences)

FLOWERING PLANTS - DICOTS (MAGNOLIOPSIDA)

1 SPECIES

TOWNSHIP = 002N013W (based on mapped Species Occurrences)

SCIENTIFIC NAME / COMMON NAME / TAXA SORT	OTHER NAMES	FAMILY (SCIENTIFIC) / FAMILY (COMMON)	GLOBAL RANK	STATE RANK	USFWS	USFS	BLM	MNPS THREAT CATEGORY	HABITAT
Penstemon lemhiensis Lemhi Beardtongue		Plantaginaceae Plantain Family	G3	S3		SENSITIVE		2	Sagebrush-grasslands

Species Occurrences verified in these Counties: Beaverhead, Deer Lodge, Ravalli, Silver Bow

State Rank Reason: *Penstemon lemhiensis* is a regional endemic that occurs only in southwest Montana and adjacent Idaho. There are numerous occurrences in Beaverhead and Ravalli Counties with a few additional occurrences located in Deer Lodge and Silver Bow Counties in Montana, but most are small to moderate in size. The number of plants in Montana is estimated at approximately 10,000 individual plants based on recent survey efforts. Plants occur on a mix of federal, state and private ownerships with National Forest lands supporting the majority of the occurrences. The species is primarily sensitive to negative impacts associated with drought conditions and fire suppression, both of which are believed to have played a significant role in the species' decline. Additional impacts to populations are occurring from noxious weed invasion, primarily spotted knapweed in the Bitterroot region. Heavy livestock grazing also negatively impacts the species. Several occurrences are found adjacent to roadsides and thus may be impacted by activities associated with road construction, maintenance and use.

Potential Species of Concern

Special Status Species

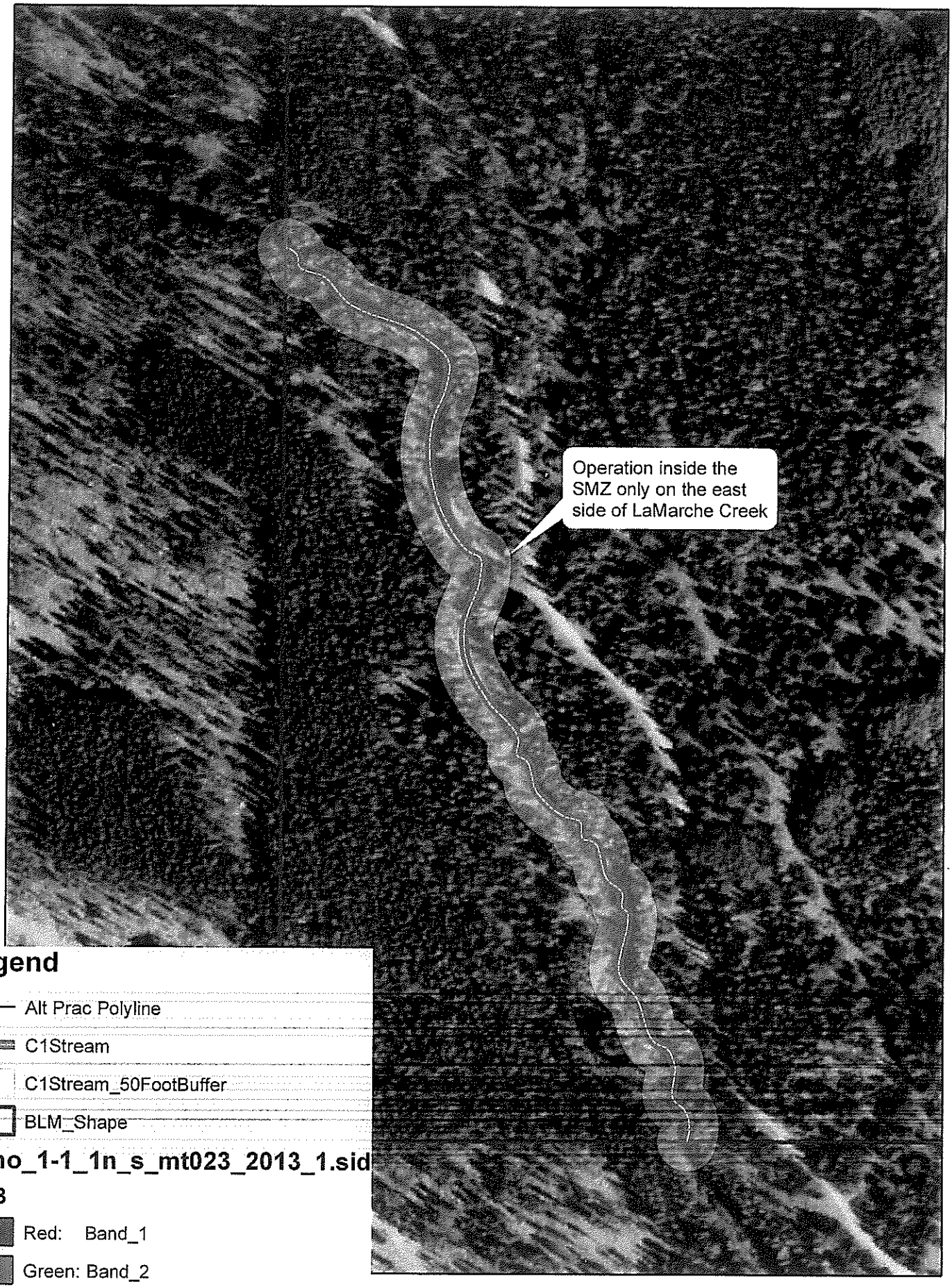
Additions To Statewide List

Species Removed From Statewide List

Citation for data on this website:
Montana Plant Species of Concern Report. Montana Natural Heritage Program. Retrieved on 12/13/2016 from http://mtnhp.org/SpeciesOfConcern/?AorP=p

BLM LaMarche Creek SMZ Salvage AP

T2N, R13W, Sec. 22



Legend

- Alt Prac Polyline
- C1Stream
- C1Stream_50FootBuffer
- BLM_Shape

ortho_1-1_1n_s_mt023_2013_1.sid

RGB

- Red: Band_1
- Green: Band_2
- Blue: Band_3

0 110 220 440 660 880

Fe